

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): ~~Process~~ A process for polymer formation by the continuous free-radical homogeneous solution polymerization, or melt polymerization, of at least one (meth)acrylate monomer ~~mixtures~~ mixture, ~~characterized in that~~ comprising feeding the at least one monomer mixture is fed at into the bottom of a tubular reactor, heating the at least one monomer mixture is heated to reaction temperature in the presence of an initiator or initiator mixture to form a monomer-initiator mixture, and stirring the monomer-initiator mixture is stirred at from 5 to 50 rpm ~~by a stirrer~~, forming a polymer, and discharging the molten polymer is discharged at the top of the tubular reactor.

Claim 2 (Currently Amended): ~~Process~~ The process according to Claim 1, ~~characterized in that~~ wherein the temperature of the reactor profile is such that the ~~monomer mixtures and polymers~~ the polymer in the reactor are always liquid.

Claim 3 (Currently Amended): ~~Process~~ The process according to Claim 1, ~~characterized in that an~~ wherein the initiator or initiator mixture is introduced within the tubular reactor.

Claim 4 (Currently Amended): ~~Process~~ The process according to Claim 1, ~~characterized in that~~ wherein the at least one monomer mixture is preheated.

Claim 5 (Currently Amended): ~~Process~~ The process according to Claim 1, ~~characterized in that it~~ wherein the process is carried out without solvent.

Claim 6 (Currently Amended): ~~Process~~ The process according to Claim 1,
~~characterized in that, wherein the final polymerization forming a polymer~~ takes place in a
downstream reactor.

Claim 7 (Currently Amended): The process ~~Process~~ according to Claim 1,
~~characterized in that~~ wherein further processing of the polymer takes place directly in a
downstream processing apparatus.

Claim 8 (Currently Amended): ~~Process~~ The process according to Claim 1,
~~characterized in that~~ wherein the at least one monomer mixture comprises two or more
monomer mixtures of different composition, ~~are fed into the tubular reactor.~~

Claim 9 (Currently Amended): ~~Monomer mixtures~~ The process according to Claim 8,
~~characterized in that they~~ wherein the two or more monomer mixtures each comprise ~~not only~~
one or more monomers, ~~but also an initiator or initiator mixtures mixture and a regulator or~~
regulator ~~mixtures~~ mixture, and auxiliaries at least one auxiliary, and at least one additive
additives, and the initiator or initiator mixture.

Claim 10 (Currently Amended): ~~Monomer mixtures~~ The process according to Claim
8, comprising two monomer mixtures, ~~characterized in that~~

wherein one mixture comprises ~~not only~~ one or more monomers, ~~but also an the~~
initiator or initiator ~~mixtures~~ mixture, at least one auxiliary and and at least one additive
~~auxiliaries and additives, and~~

wherein the other mixture comprises ~~not only~~ one or more monomers, ~~but also a~~ the regulator or regulator mixture, ~~and auxiliaries~~ at least one auxiliary and at least one additive additives.

Claim 11 (Currently Amended): ~~Polymers~~ A polymer prepared ~~according to~~ by the process of Claim 1, wherein the process is a melt polymerization process, wherein ~~characterized in that melt polymers have~~ the polymer has a glass transition temperature \leq 70°C.

Claim 12 (Currently Amended): A tubular ~~Tubular~~ reactor, arranged vertically, comprising ~~with~~ starting material introduction in the lower third of the reactor, and comprising product take-off in the upper third of the reactor, ~~characterized in that~~ wherein the reactor comprises reactor zones, wherein the reactor zones can be heated separately, and wherein a centrally arranged stirrer unit operates at rotation rates of from 5 to 50 rpm.

Claim 13 (Currently Amended): A polymer formed by the process of Claim 1 ~~Use of the polymers obtainable by a process according to any of Claims 1 to 8, in the form of hot-melt adhesives.~~

Claim 14 (Currently Amended): ~~Use of the polymers obtainable by a process as claimed in any of Claims 1 to 8, in the form of~~ A method of forming a viscosity index improver, comprising, forming the viscosity index improver with the polymer of Claim 13.

Claim 15 (Currently Amended): A method of making a setting-point improver comprising forming the setting-point improver with the polymer of Claim 13 ~~Use of the polymers obtainable by a process according to any of Claim 1 to 8, in the form of setting-point improvers.~~

Claim 16 (Currently Amended): ~~Use of the polymers obtainable by a process according to any of Claims 1 to 8, in the form of lacquers~~ A method of forming a lacquer, comprising forming the lacquer with the polymer of Claim 13.

Claim 17 (New): A method of making a hot-melt adhesive, comprising forming the hot-melt adhesive with the polymer of Claim 13.

Claim 18 (New): The process of Claim 1, wherein the process is a melt polymerization process.

Claim 19 (New): The process of Claim 1, wherein the process is a continuous free-radical homogeneous solution polymerization process.

Claim 20 (New): A polymer formed by the process of Claim 2.